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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/663,598
Filing Date: September 16, 2003
Appellant(s): LANKFORD, GERALD WINTON

Robert H. Kelly

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/16/2008 appealing from the Office action

mailed 03/19/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20050118998	Sanchez Ferreras et al.	06/2005
6,597,909	Takubo et al.	07/2003
20040190522	Aerrabotu et al.	09/2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4.   Claims 1-7,9-11 and 13-20 are rejected under U.S.C. 103(a) as being

anticipated by Sanchez Ferreras et al., (U.S. 20050118998 A1), (hereinafter

**Sanchez) in view of Aerrabotu et al., (U.S. 20040190522 A1), (hereinafter
Aerrabotu) and further in view of Takubo et al., (US 6,597,909), (hereinafter
Takubo).**

Regarding claims 1 and 13, Sanchez discloses an apparatus for a communication

system having multiple portions, said apparatus comprises:

a detector (= processor 4 detects and reads all the information that passes

through it, see Pars. [0005] and [0045]) adapted to receive values of positional

information associated with mobile nodes (= mobile network can detect mobile

terminals, see Par. [0017]), during operation thereof to communicate by way of network

portions (HLR, VLR and gateway 2) in whose coverage area that the mobile nodes,

respectively, are positioned said detector configured to form indications of the values of

the positional information (= processor 4 continuous reads information exchange,

see Par. [0025]);

an associator adapted to receive the indications formed by said detector of the

values of the positional information (= analyzer 6, collects information, analyzes

information of a location changes, see Par. [0006 and 0029]), said associator

configured to associate position of each of the mobile nodes with corresponding

<u>respective</u> network portion (= the information are report such that terminals can obtain

service while they are in foreign network, see Pars. [0023-25] and [0029]), respectively,

through which communication are effectuated, thereby to identify roaming relationship

between each of the mobile nodes and the corresponding network portion when the

mobile nodes are roaming (= foreign networks) and

a storage element coupled to said associator, said storage element configured to store values representative of associations formed by said associator, the values together forming a roaming network table indicating the roaming relationships (= the database 7 has information of which subscribers are located in a foreign network, see Par. [0026] and the database incorporates a log table which could be updated with a each network change, see Pars. [0041-42, 0012 and 0033]), the value forming entries, the mobile nodes identified in terms of their respective home network portion (see Pars. 0029, 0043 and 0047), the roaming network table accessible to identify the roaming relationships identified therein (= the database 7 has information of which subscribers are located in a foreign network, see Par. [0026] and the database incorporates a log table which could be updated with a each network change, see Pars. [0012, 0041-42, 0032-36]), usable subsequently to determine roaming capability of selected coverage areas of selected network portions (see Pars. [0036-37 and 0046]).

Sanchez does discloses a roaming network but fails specifically to teach that "individual ones of the entries given lesser weight than other entries, without being deleted, when aged beyond a selected age" and that the "network is a packet data network and the network is connected other network by the way of a "**respective gateway**" to each of respective network portion.

Takubo, however teaches a roaming subscriber's data storage system where roaming data are store in a prioritized fashion (i.e. in ascending order) based on the dates that particular data was accessed (see col. 1, line 52- col. 2, line 13; and col. 7, line 8- col. 8, line 20; whereby the storage of data in the prioritized order is being

associated with the "entries <u>given lesser weight than other entries, without being</u>

<u>deleted</u>").

It would therefore have been obvious to one of the ordinary skill in the art to

combine the teaching of Takubo with Sanchez's system in achieving a communication

system which can offer an optimum economical service with a small amount of storage

capacity of a visitor location register (VLR) memory (see col. 2, lines 51-55; and col. 8,

line 60- col. 8, line 2).

The combination of Sanchez and Aerrabotu fails to mention that the "network is a

packet data network and the network is connected other network by the way of a

"respective <u>gateway" to each of</u> respective network portion.

However, Aerrabotu teaches a mobile network including an Emergency Packet

Data Network (E-PDN) coupled to gateways SGSN and GGSN (see Pars. [0011-12 and

0021-23]; whereby the E-PDN is being associated with the "packet data network" and

the SGSN and GGSN are being associated with the "respective gateway").

It would therefore have been obvious to one of the ordinary skill in the art to

combine the teaching of Aerrabotu with the teachings of Sanchez and Takubo in

achieving a system that provides call connection as well as preventing authorized use of

the system (see Aerrabotu; Par. 0011).

Regarding claims 2 and 14, Sanchez further discloses the apparatus of claims 1 and

15 wherein each mobile nodes (mobile terminals, see Par. [0017 and 0025]) has an

identifier (subscriber's profile, see Pars. [0021 and 0043]) associated therewith and

wherein said detector is further adapted to receive the identifier and for detecting values

thereof (processor 4 continuous reads information exchange, see Par. [0025]).

Regarding claims 3 and 15, as recited in claims 2 and 14, Sanchez teaches mobile

terminals, (see Par. [0017 and 0025]), but Sanchez and Takubo fail to teach that the

radio communication system comprises a cellular radio communication system that

provides for GPRS (General Packet Radio Service).

Aerrabotu teaches that the International Mobile Subscriber Identity (IMSI) is used

as the mobile station identity in GPRS attach procedure when the mobile station does

not have a SIM in a packet-switched data domain (see Pars. [0010] and [0014]

respectively).

It would therefore have been obvious to one of the ordinary skill in the art to

combine the teaching of Aerrabotu with the teachings of Sanchez and Takubo in

achieving a system that provides call connection as well as preventing authorized use of

the system (see Aerrabotu; Par. 0011).

Regarding claims 4 and 16, as recited in claims 3 and 15, Sanchez further teaches the

apparatus/method wherein at least the portion of the IMSI number (MSISDN which

correspond to the mobile telephone number, see Par. [0043]) includes a Mobile Network

Code (MNC) (the country code of the network in which it is located, see Par. [0043]), the

Mobile Network Code identifying a home network portion associated with each mobile

(mobile terminals, see Par. [0017 and 0025]) node; the home network portion of the

multiple network portions (consultation is made at the HLR and VLR when the subscriber enter into a new network, see Par. [0037]).

Regarding claims 5 and 17, as recited in claims 3 and 15 Sanchez further disclose apparatus/method wherein the IMSI number (MSISDN which correspond to the mobile telephone number, see Par. [0043]) includes a Mobile Country Code (MCC) and wherein the at least the portion of the IMSI number of which said detector detects the values comprises the Mobile Country Code; and at least the portion of the IMSI number comprises a mobile country code (the country code of the network in which it is located, see Par. [0043]).

Regarding claims 6 and 9, Sanchez further discloses an apparatus as recited in claims 1 and 15, wherein each node registers with a network portion of the multiple network portions (HLR, VLR and gateway 2) at selected times (location update every time mobile terminal changes location, see Page 2, line [0021]) and wherein the positional information detected by said detector is communicated by each mobile node (mobile terminals, see Par. [0017 and 0025]) pursuant to registration with the network part; the roaming network table further includes an indication of a time at which the values representative of the associations are stored at said storage element; and the roaming table further comprises identifying times at which values are entered thereat (table contains date of the last location update, see Pars. [0018, 0020-23, 0043-45 and 0049]).

Regarding claim 7, as recited in claim in claim 1, Sanchez teaches mobile terminals (see Par. [0017 and 0025]), but Sanchez and Takubo fail to disclose that the

communications of the mobile node are formatted into messages, the messages having

header parts, and wherein the positional information detected by said detector is

embodied in the header parts of the messages.

Aerrabotu teaches an incoming call IP address for device and the regulating

packet flow which is use for Internet messaging subsystem (see Par. [0016])

It would therefore have been obvious to one of the ordinary skill in the art to

combine the teaching of Aerrabotu with the teachings of Sanchez and Takubo in

achieving a system that provides call connection as well as preventing authorized use of

the system (see Aerrabotu; Par. 0011).

Regarding claim 10, as recited in claim 9, Sanchez further discloses that the apparatus

further comprising a roaming table entry deleter coupled to said storage element said

roaming table entry deleter selectably operable to delete selected values of the roaming

entry table maintained at said storage element when aged beyond the selected age

(subscriber's entry and exit information at the network are periodically

eliminated/updated from the log table, see Par. [0055]).

Regarding claim 11, as recited in claim 10, Sanchez further discloses wherein said

roaming entry deleter deletes values of the roaming network (foreign network) table

stored threat for longer than a selected time period, the selected time period identifying

aging beyond the selected age (subscriber's entry and exit information at the network

are periodically eliminated from the log table, see Pars. [0013 and 0055]).

Regarding claim 18, Sanchez further discloses an apparatus as recited in claims 1 and

15, wherein each node registers with a network portion of the multiple network portions

(HLR, VLR and gateway 2) at selected times (location update every time mobile

terminal changes location, see Page 2, line [0021]) and wherein the positional

information detected by said detector is communicated by each mobile node (mobile

terminals, see Par. [0017 and 0025]) pursuant to registration with the network part; the

roaming network table further includes an indication of a time at which the values

representative of the associations are stored at said storage element; and the roaming

table further comprises identifying times at which values are entered thereat (table

contains date of the last location update, see Pars. [0018, 0020-23, 0043-45 and 0049]).

Regarding claim 19, recited in claim 18, Sanchez further discloses the operations of

accessing the roaming network table and determining the roaming relationships

indicated therein (see Page 3, lines [0032-0036]).

Regarding claim 20, as recited in claim 13, Sanchez further discloses the operation of

deleting entries out of the roaming network table once aged beyond the selected age

(subscriber's entry and exit information at the network are periodically eliminated from

the log table, see Pars. [0013 and 0055]).

(10) Response to Argument

Regarding the alleged unpatentability over cited prior arts of Sanchez Ferreras et al.,

(U.S. 20050118998 A1), (hereinafter, Sanchez), Aerrabotu et al., (U.S. 20040190522

A1), (hereinafter, Aerrabotu) and Takubo et al., (US 6,597,909), (hereinafter, Takubo),

the Examiner will detail the position in which the examination of the cited claims were

made.

Rejection of Claim 1-7 and 9-11 under 35 U.S.C103(a)

1.   With reference to whether Claims 1-7 and 9-11 are patentable under 35 U.S.C.

103(a) over Sanchez in view of Aerrabotu and Takubo, the appellant argues (1) that

Takubo fails to teach the claimed limitations, "individual ones of the entries given less

weight than other entries, without being deleted, when aged beyond a selected age"

(see claim 1); and (2) that Aerrabotu fails to teach the claimed limitations, the network is

a "packet data network coupled by way of said respective gateway to each of said

respective network portions" (see claim 1).

        The examiner, however, respectfully disagrees with such an assertion.

a.   With respect to the claimed limitations "individual ones of the entries given less

weight than other entries, without being deleted, when aged beyond a selected age",

Sanchez, which is the primary reference, teaches a system in which an entry/exit

information of a mobile terminal in foreign network, is detected, stored, analyzed and

circulated through gateways which the mobile terminal accesses (see Pars. [0002, 0005

and 0025]). Sanchez further mentions that database 7 that incorporates a log table

which could be updated with each mobile terminal's network change; and obtaining

statistical data of interest from the data base see Pars. [0012, 0041-42, 0032-36]).

However, Sanchez fails to mention "individual ones of the entries given less

weight than other entries, without being deleted, when aged beyond a selected age".

Thus, Sanchez fails to mention that the information in the database are given less

weight than other information and the information is not deleted when aged beyond a

selected age.

Takubo, which is an analogous art, teaches the storage of subscriber's data in

priority table; a determination of the highest priority of subscriber's data based on the

date when subscriber data was registered; and how often subscriber data is accessed

within predetermined date and time (see col. 7, lines 26-41). Sanchez also mentions

subscriber data are arranged in ascending order from top to bottom according to priority

(see col. 7, lines 48-53).

Therefore the cited portions from Takubo clearly show that subscriber's data is not

been deleted from the priority table, as the appellant had argued; and a priority/weight is

given to subscriber data base on predetermined data, time and how often the data is

accessed, which meets the appellant's argued limitations "individual ones of the entries

given less weight than other entries, when aged beyond a selected age".

b.   With respect to the claimed limitations "packet data network coupled by way of

said respective gateway to each of said respective network portions ", Sanchez, which

is the primary reference, also teaches a system in which an entry/exit information of a

mobile terminal in foreign network, is detected, stored, analyzed and circulated through gateways which the mobile terminal accesses (see Pars. [0002, 0005 and 0025]). Therefore it is clear that the detection and circulation of subscriber's data through gateways in a foreign network, is taught by the cited portion of Sanchez.

The claimed limitations which Sanchez and Takubo explicitly fail to mention is that of the foreign network being a packet data network including respective gateways.

However, Aerrabotu, which is an analogous art, discloses an Emergency Packet Data Network, E-PDN that is connected to various gateways network such as Gateway GPRS, SGSN and UTRAN (see Pars. [0011-12 and 0021-23]; whereby the E-PDN is being associated with the "packet data network" and the SGSN and GGSN are being associated with the "respective gateway").

The combined system of Sanchez, Takubo and Aerrabotu is proper to teach the appellant's argued limitations because such a communication system the includes foreign network such as Emergency Packet Data Network, E-PDN; and various gateways such the SGSN and GGSN. Therefore it is proper to combine Aerrabotu with Sanchez and Takubo.

c.   Because Claims 2-7 and 9-11 depend on Claim 1, it is respectfully submitted that claims 2-7 and 9-11 are also rejected, for the reasons set forth above.

2.   **Rejection of Claim 13-20 under 35 U.S.C I03(a)**

With reference to whether Claims 13-20 are patentable under 35 U.S.C. 103(a) over

Sanchez in view of Aerrabotu and Takubo, the appellant argues (1) that Takubo fails to teach the claimed limitations, "individual ones of the entries <u>given less weight than other entries, without being deleted,</u> when aged beyond a selected age" (see claim 13); and (2) that Aerrabotu fails to teach the claimed limitations, the network is a "packet data network coupled by way of said <u>respective gateway</u> to each of said respective network portions" (see claim 13).

The examiner, however, respectfully disagrees with such an assertion.

a.   With respect to the claimed limitations "<u>individual ones of the entries given less weight than other entries, without being deleted, when aged beyond a selected age</u>", Sanchez, which is the primary reference, teaches a system in which an entry/exit information of a mobile terminal in foreign network, is detected, stored, analyzed and circulated through gateways which the mobile terminal accesses (see Pars. [0002, 0005 and 0025]). Sanchez further mentions that database 7 that incorporates a log table which could be updated with each mobile terminal's network change; and obtaining statistical data of interest from the data base see Pars. [0012, 0041-42, 0032-36]).

However, Sanchez fails to mention "<u>individual ones of the entries given less weight than other entries, without being deleted, when aged beyond a selected age</u>". Thus, Sanchez fails to mention that the information in the database are given less weight than other information and the information is not deleted when aged beyond a selected age.

Takubo, which is an analogous art, teaches the storage of subscriber's data in priority table; a determination of the highest priority of subscriber's data based on the

date when subscriber data was registered; and how often subscriber data is accessed

within predetermined date and time (see col. 7, lines 26-41). Sanchez also mentions

subscriber data are arranged in ascending order from top to bottom according to priority

(see col. 7, lines 48-53).

Therefore the cited portions from Takubo clearly show that subscriber's data is not

been deleted from the priority table, as the appellant had argued; and a priority/weight is

given to subscriber data base on predetermined data, time and how often the data is

accessed, which meets the appellant's argued limitations "<u>individual ones of the entries</u>

<u>given less weight than other entries, when aged beyond a selected age</u>".

b.   With respect to the claimed limitations "<u>packet data network coupled by way of</u>

<u>said respective gateway to each of said respective network portions</u> ", Sanchez, which

is the primary reference, also teaches a system in which an entry/exit information of a

mobile terminal in foreign network, is detected, stored, analyzed and circulated through

gateways which the mobile terminal accesses (see Pars. [0002, 0005 and 0025]).

Therefore it is clear that the detection and circulation of subscriber's data through

gateways in a foreign network, is taught by the cited portion of Sanchez.

The claimed limitations which Sanchez and Takubo explicitly fail to mention is

that of the foreign network being <u>a packet data network</u> including respective gateways.

However, Aerrabotu, which is an analogous art, discloses an Emergency Packet

Data Network, E-PDN that is connected to various gateways network such as Gateway

GPRS, SGSN and UTRAN (see Pars. [0011-12 and 0021-23]; whereby the E-PDN is

being associated with the "packet data network" and the SGSN and GGSN are being

associated with the "respective gateway").

The combined system of Sanchez, Takubo and Aerrabotu is proper to teach the

appellant's argued limitations because such a communication system the includes

foreign network such as Emergency Packet Data Network, E-PDN; and various

gateways such the SGSN and GGSN. Therefore it is proper to combine Aerrabotu with

Sanchez and Takubo.

c.   Because Claims 14-20 depend on Claim 13, it is respectfully submitted that

claims 14-20 are also rejected, for the reasons set forth above.

The appellant's arguments are, therefore moot and not persuasive.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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/VINCENT P. HARPER/
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